

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Pascal NICOLLE et al.

Serial No.: New Application

Filed: February 13, 2002

For: PROGRAMMING STATION GENERATING A COMPACTED PROGRAM
AND AUTOMATION EQUIPMENT USING SUCH A PROGRAM

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to examination of the above-identified application,
please enter the following specification changes as noted below:

IN THE CLAIMS:

Please amend claims 4, 8 and 12 as follows:

4. (Amended) Programming station according to claim 1,
characterised in that the set of description files (401) contains
an application program description file, an application input-
output description file, and an application data description
file.

8. (Amended) Programming station according to claim 1, characterised in that it includes an XML handler (20) in a non-volatile memory dialoguing through notifications firstly with a management module (30) of the tree structure representative of the automation application expressed in the XML language, and also with a plurality of database managers (Mng1, Mng2, etc.), each manager being specific to part of the automation application stored in one of the databases (Db1, Db2, etc.).

12. (Amended) Automation equipment according to claim 10, characterised in that it comprises means of decompressing a file in the compacted language (501) to a description file in XML language (401) by using a specific stylesheet (601) stored in memory (50).

REMARKS

Claims 1-12 remain pending herein. Claims 4, 8 and 12 have been amended hereby.

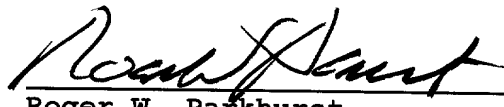
This Preliminary Amendment is submitted to eliminate multiply dependent claims from the above-identified application.

Examination of this application on its merits is respectfully requested.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.

February 13, 2002
Date


Roger W. Parkhurst
Registration No. 25,177

RWP/mhs

Attachment: Claim Mark-ups

Attorney Docket No. SCHN:019

PARKHURST & WENDEL, L.L.P.
1421 Prince Street, Suite 210
Alexandria, Virginia 22314-2805
Telephone: (703) 739-0220

CLAIMS

1. Programming station for an automation application designed to be executed in an automation equipment, the programming station comprising a memory containing a set of one or several description files
5 (401), each description file describing part of the automation application and being expressed in a single, hierarchised and object oriented language, characterised in that the programming station uses a compression program (60) that generates a file in the
10 compacted format (501) for each description file, the contents of the compacted file being sufficient for the description of part of the application considered, and in that it uses a loading program to store each compacted file (501) in a memory (50) in the automation
15 equipment.

2. Programming station according to claim 1, characterised in that it uses a decompression program (61) to generate a description file (401) in a single, hierarchised and object oriented language describing
20 part of the application, from a compacted file (501) stored in the automation equipment memory (50).

3. Programming station according to claim 2, characterised in that the single, hierarchised and object oriented language is the XML language.

25 4. Programming station according to ~~one of claims 1 to 3~~ claim 1, characterised in that the set of description files (401) contains an application program description file, an application input-output description file, and an application data description
30 file.

5. Programming station according claim 3, characterised in that the compression program (60) and the decompression program (61) comprise two steps.

6. Programming station according to claim 3,
5 characterised in that the compression program (60) comprises a step to reduce the tags contained in a description file (401) expressed in the XML language by application of a specific stylesheet (601) and a step to execute a compaction algorithm (603) adapted to XML
10 files.

7. Programming station according to claim 3, characterised in that the decompression program (61) comprises a step to execute a decompaction algorithm (603) adapted to XML files and a step to recreate
15 source tags contained in a description file (401) expressed in the XML language, by application of a specific stylesheet (601).

8. Programming station according to ~~one of the previous claims~~ claim 1, characterised in that it
20 includes an XML handler (20) in a non-volatile memory dialoguing through notifications firstly with a management module (30) of the tree structure representative of the automation application expressed in the XML language, and also with a plurality of
25 database managers (Mng1, Mng2, etc.), each manager being specific to part of the automation application stored in one of the databases (Db1, Db2, etc.).

9. Automation equipment comprising a memory (50) containing an automation application program in the
30 form of a binary file (502) executable by the automation equipment, characterised in that the automation equipment stores the executable file (502) in its memory, together with one or several files (501)

in compacted format output from a set of one or more description file(s) (401) describing the automation application and expressed in a single, hierarchised and object oriented language.

5 10. Automation equipment according to claim 9, characterised in that the single, hierarchised and object oriented language is the XML language.

10 11. Automation equipment according to claim 10, characterised in that it comprises translation means in order to convert application description files (401) expressed in the XML language into a binary file (502) that can be executed by the automation equipment.

15 12. Automation equipment according to claim 10 ~~or~~ ~~11~~, characterised in that it comprises means of decompressing a file in the compacted language (501) to a description file in XML language (401) by using a specific stylesheet (601) stored in memory (50).